

April 9, 1951.

Mr. F. G. Albritton,
Committee on Handbook of biological data,
American Institute of Biological Sciences,
2101 Constitution Avenue,
Washington 25, D.C.

Dear Mr. Albritton:

I have your letter and enclosures of April 4, 1951 relating to handbook data on "Nutrient Requirements of certain Bacteria".

I should be pleased to cooperate to any reasonable extent on this enterprise, but it is not at all clear what you are asking me to do. It would not be possible for me to undertake a comprehensive review of bacterial nutrition, nor do I anticipate that this is what you have in mind.

If I may proffer my opinions for what they are worth, I would express considerable hesitation as to the propriety of a handbook listing of bacterial nutrient requirements. The latter are now generally understood as being under close genetic control; as a corollary, they may vary considerably from one strain to another. In addition, they depend to a varying degree on the specific conditions of culture (pH, temperature, presence of other growth factors, and others). General discussions of bacterial nutrition, of great value, have appeared as review articles, particularly by B.C.J. Knight of the Wellcome Research Laboratories in England, and W.H. Peterson of the Biochemistry Dept. here. More detailed discussions than these may be of use in taxonomic work, - and I would emphasize the desirability of nutritional studies as an essential part of taxonomic descriptions. However, I feel that the tabular compilation of this type of datum is liable to be more misleading than useful.

Yours sincerely,

Joshua Lederberg,
Associate Professor of Genetics

THE HANDBOOK
NEEDS
NUTRITION AND METABOLISM
DATA

Please suggest names of possible contributors of data for these table titles (yourself, an associate in your laboratory or department, or other qualified persons known to you),*and add the other requested information, if available.

TITLE OF DESIRED TABLE	PERSONS COMPETENT TO PREPARE TABLES (name and address)	CENTERS OF CURRENT RESEARCH, U.S. & ABROAD	MAJOR SOURCES OF DATA IN THE LITERATURE
A. Nutrient Requirements of Certain* Bacteria P387			
B. Nutrient Requirements of Certain* Molds P388			
C. Nutrient Requirements of Certain* Other Micro-organisms P389			
D-1. Nutrient Requirements of Certain* Plant Forms, in terms of Optimal Chemical Composition of Culture Solutions P390			

* Representative, or of scientific or economic importance

TITLE OF DESIRED TABLE	PERSONS COMPETENT TO PREPARE TABLES (name and address)	CENTERS OF CURRENT RESEARCH, U.S. & ABROAD	MAJOR SOURCES OF DATA IN THE LITERATURE
D-2. Nutrient Re- quirements of Certain* Plant Forms, in terms of Optimal Soil Composition P391			
E-1. Nutrient Re- quirements of Certain* Animal Forms, in terms of Amino Acids (or Protein) CH, Fat, Minerals and Vitamins P392			
E-2. Nutrient Re- quirements of Certain* Animal Forms, in terms of Food Items in Typical Diet P393			
F. Chemical Compo- sition of Cer- tain* Bacteria P394			
G. Chemical Compo- sition of Cer- tain* Molds P395			
H. Chemical Compo- sition of Cer- tain* Other Microorganisms P396			

* Representative, or of scientific or economic importance

TITLE OF DESIRED TABLE	PERSONS COMPETENT TO PREPARE TABLES (name and address)	CENTERS OF CURRENT RESEARCH, U.S. & ABROAD	MAJOR SOURCES OF DATA IN THE LITERATURE
I. Chemical Composition of Certain* Plant Forms and their Tissues P397			
J. Chemical Composition of Certain* Animal Forms and their Tissues P398			
K. Metabolic Products of Certain* Bacteria P399			
L. Metabolic Products of Certain* Molds P400			
M. Metabolic Products of Certain* Other Microorganisms P401			
N. Metabolic Products of Certain* Plant Forms and their Tissues P402			
O. Metabolic Products of Certain* Animal Forms and their Tissues P403			

* Representative, or of scientific or economic importance